SECTION 11

Other services

Dialysis
Hospice
Clinical laboratory

Chart 11-1. Number of dialysis facilities is growing and share of for-profit and freestanding dialysis providers is increasing

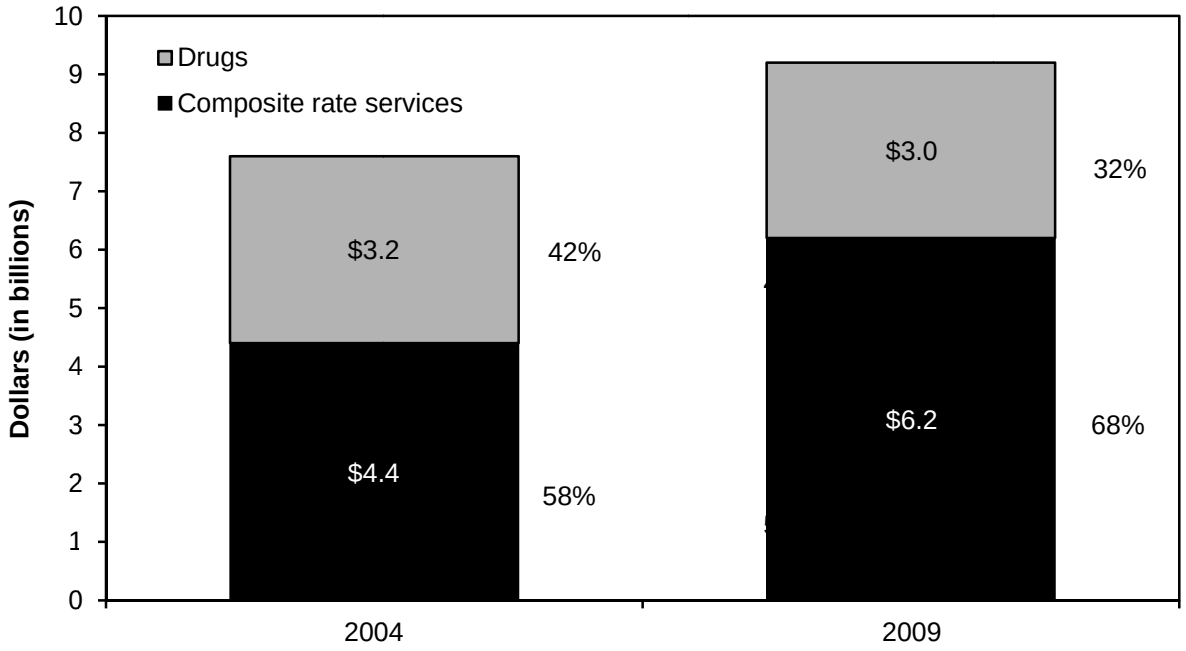
	2000	2005	2010	Average annual percent change 2000–2010	Average annual percent change 2005–2010
Total number of:					
Dialysis facilities	3,805	4,542	5,413	4%	4%
Hemodialysis stations	59,596	78,889	95,489	5	4
Mean number of hemodialysis stations	16	17	18	1	0.3
Percent of all facilities:					
Nonchain	N/A	24%	20%	N/A	–0.3
Affiliated with any chain	N/A	76	80	N/A	5
Affiliated with largest two chains	N/A	60	61	N/A	4
Hospital based	18%	14	10	–2	–3
Freestanding	82	86	90	5	4
Rural	25	25	24	4	3
Urban	75	75	76	4	4
For profit	78	78	82	4	5
Nonprofit	22	22	18	2	–1

Note: N/A (not available). Nonprofit includes facilities designated as either nonprofit or government.

Source: Compiled by MedPAC from the CMS facility survey file and Dialysis Compare file.

- Between 2000 and 2010, the number of freestanding and for-profit facilities increased, while hospital-based and nonprofit facilities decreased. Freestanding facilities increased from 82 percent to 90 percent of all facilities, and for-profit facilities increased from 78 percent to 82 percent of all facilities.
- Two national for-profit chains own about 60 percent of all facilities and about 70 percent of all freestanding facilities.
- Between 2000 and 2010, the proportion of facilities located in rural areas has remained relatively constant.
- The number of facilities has increased 4 percent per year since 2000. The average size of a facility has increased slightly, as evidenced by the mean number of hemodialysis stations per facility, which increased from 16 in 2000 to 18 in 2010.

Chart 11-2. Medicare spending for outpatient dialysis services furnished by freestanding and hospital-based dialysis facilities, 2004 and 2009



Source: Compiled by MedPAC from the 2004 and 2009 institutional outpatient files from CMS.

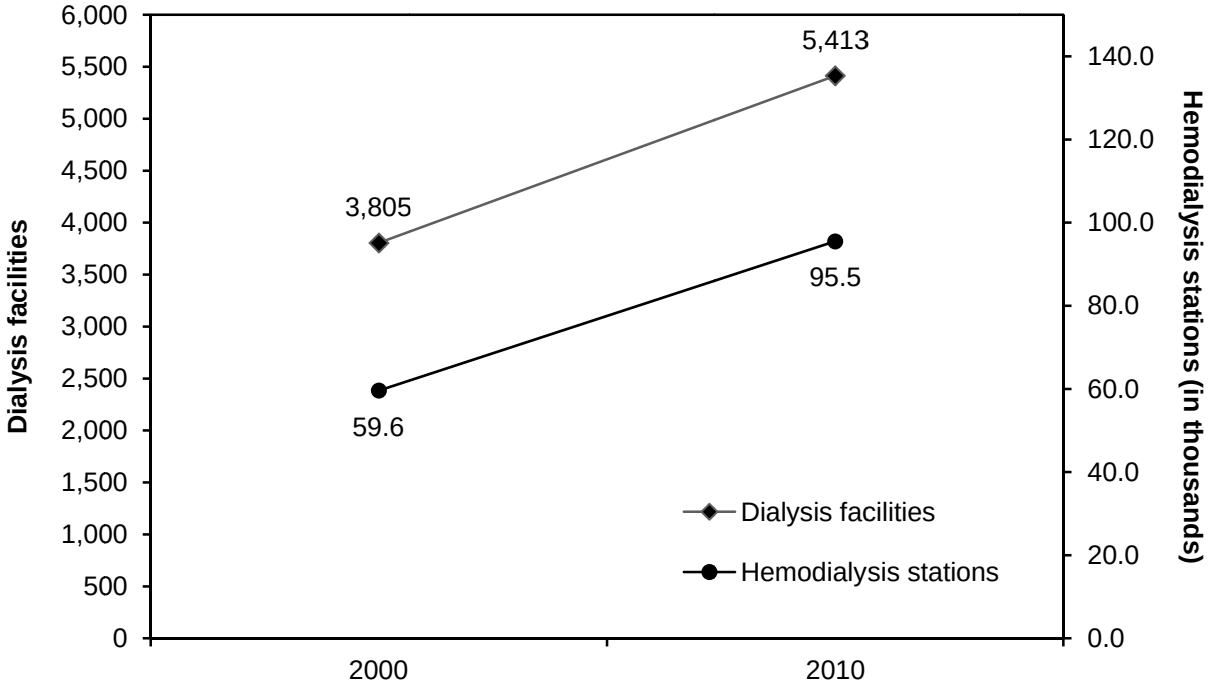
- Between 2004 and 2009, expenditures for composite rate services and dialysis drugs increased by about 4 percent per year. During this time, expenditures for composite rate services increased by 7 percent per year while expenditures for dialysis drugs decreased by 2 percent per year.

- Freestanding dialysis facilities treat most dialysis beneficiaries and accounted for 87 percent of expenditures in 2004 and 91 percent of expenditures in 2009. Between 2008 (reported in MedPAC's June 2010 Data Book) and 2009, total Medicare expenditures for dialysis services at freestanding dialysis facilities increased by 7 percent to $8.3 billion.

- The decline in spending for dialysis drugs and the increase in the proportion of total dialysis spending for composite rate services is due to statutory and regulatory changes. Beginning in 2005, CMS implemented policies that increased Medicare's payment rate for composite rate services but lowered the rate for dialysis drugs.

- Despite the decrease in the drug payment rate, the total volume of most dialysis drugs (holding price constant) increased between 2004 and 2009 with one exception. Between 2007 and 2008, the volume of erythropoiesis-stimulating agents (ESAs), a class of drugs used to treat anemia, a common condition among dialysis patients, declined. The decline in the volume of ESAs was linked to new clinical evidence about the appropriate use of these drugs as well as changes in CMS's payment policies for ESAs.

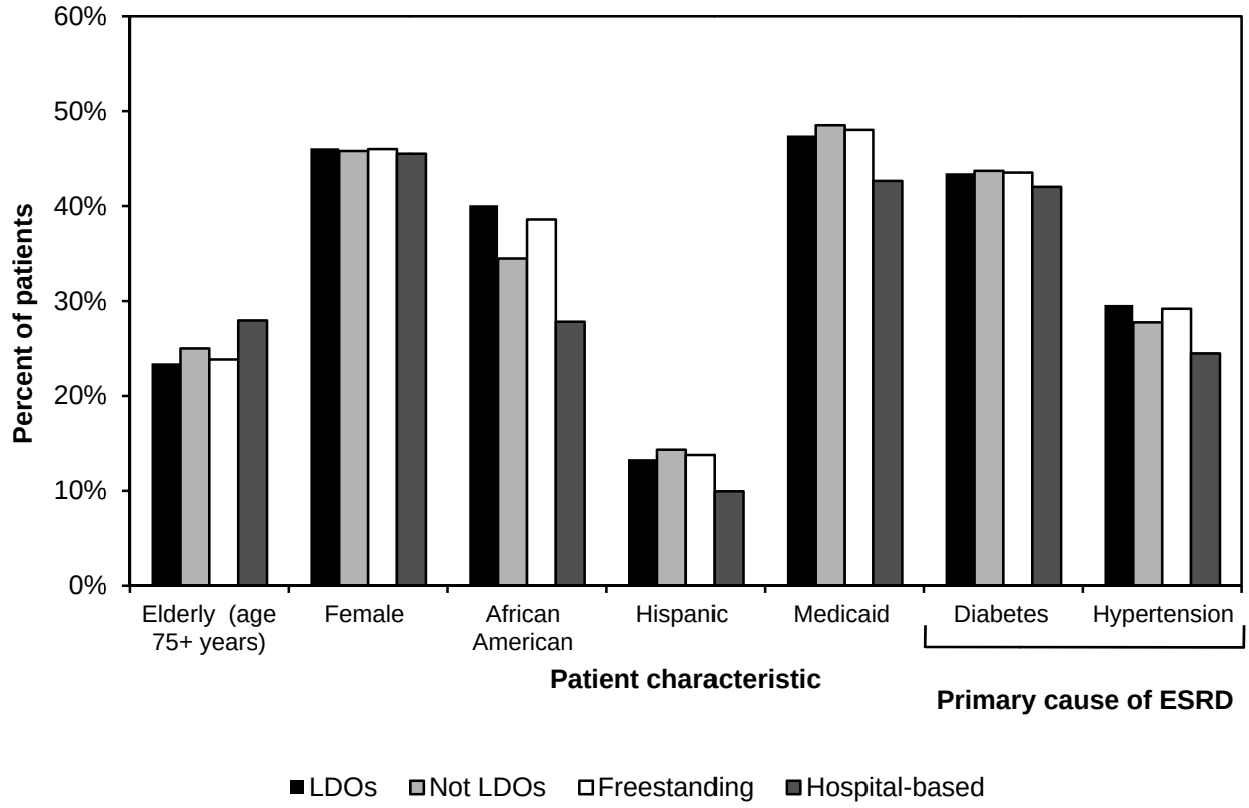
Chart 11-3. Dialysis facilities' capacity increased between 2000 and 2010



Source: Compiled by MedPAC from the 2000 Facility Survey file from CMS and the 2010 Dialysis Compare database from CMS.

- Providers have met the demand for furnishing care to an increasing number of dialysis patients by opening new facilities. In 2010, an average facility had about 18 hemodialysis stations.
- Between 2000 and 2010, the total number of dialysis facilities grew by about 4 percent annually, and the number of hemodialysis stations grew by 5 percent annually.

Chart 11-4. Characteristics of dialysis patients, by type of facility, 2009



Note: LDO (large dialysis organization), ESRD (end-stage renal disease). The facility types are not mutually exclusive.

Source: MedPAC analysis of dialysis claims files, denominator files, Renal Management Information System files, and Dialysis Compare files from CMS.

- Across the different provider types, the proportion of patients who are elderly, female, African American, Hispanic, and dually eligible for Medicaid does not differ by more than 1 percentage point between 2008 and 2009 (data not shown for 2008).
- This analysis suggests that providers did not change the mix of patients they cared for between 2008 and 2009, including the large dialysis organizations, which account for about 60 percent of all facilities.
- In 2008 and 2009, freestanding facilities were more likely than hospital-based facilities to treat African Americans and dual eligibles. Freestanding facilities account for about 90 percent of all dialysis facilities.

Chart 11-5. The ESRD population is growing, and most ESRD patients undergo dialysis

	1998		2003		2008	
	Patients (thousands)	Percent	Patients (thousands)	Percent	Patients (thousands)	Percent
Total	351.4	100%	449.4	100%	548.0	100%
Dialysis	255.2	73	320.5	71	382.3	70
In-center hemodialysis	225.1	64	291.8	65	350.8	64
Home hemodialysis	2.5	1	1.9	<1	3.8	1
Peritoneal dialysis	26.6	8	25.9	6	26.5	5
Unknown	1.1	<1	0.9	<1	1.2	<1
Functioning graft and kidney transplants	96.2	27	128.9	29	165.6	30

Note: ESRD (end-stage renal disease). Totals may not equal sum of components due to rounding.

Source: Compiled by MedPAC from the United States Renal Data System.

- Persons with end-stage renal disease (ESRD) require either dialysis or a kidney transplant to maintain life. The total number of ESRD patients increased by 5 percent annually between 1998 and 2008.

- In hemodialysis, a patient's blood flows through a machine with a special filter that removes wastes and extra fluids. In peritoneal dialysis, the patient's blood is cleaned by using the lining of his or her abdomen as a filter. Peritoneal dialysis is usually performed in a patient's home.

- Most ESRD patients undergo hemodialysis administered in dialysis facilities three times a week. Between 1998 and 2008, the total number of in-center hemodialysis patients increased by 5 percent annually while the number of patients using the predominant home modality—peritoneal dialysis—remained about the same. Although only a small proportion of all dialysis patients undergo home hemodialysis, the number of these patients grew 4 percent annually during this time period.

- Functioning graft patients are patients who have had a successful kidney transplant. Patients undergoing kidney transplant may receive either a living or a cadaveric kidney donation. In 2008, 34 percent of the kidneys were from living donors and 66 percent were from cadaver donors.

Chart 11-6. Diabetics, the elderly, Asian Americans, and Hispanics are among the fastest growing segments of the ESRD population

	Percent of total in 2008	Average annual percent change 2003–2008
Total (*n* = 547,982)	100%	4%
Age (years)		
0–19	1	2
20–44	18	1
45–64	45	5
65–79	27	4
80+	8	6
Sex		
Male	56	4
Female	44	4
Race/ethnicity		
White	61	4
African American	32	4
Native American	1	4
Asian American	5	7
Hispanic	15	7
Non-Hispanic	85	4
Underlying cause of ESRD		
Diabetes	38	5
Hypertension	24	4
Glomerulonephritis	15	2
Other causes	23	5

Note: ESRD (end-stage renal disease). Totals may not equal sum of the components due to rounding.

Source: Compiled by MedPAC from the United States Renal Data System.

- Among end-stage renal disease (ESRD) patients, 36 percent are over age 65. About 60 percent are White.
- Diabetes is the most common cause of renal failure.
- The number of ESRD patients increased by 4 percent annually between 2003 and 2008. Among the fastest growing groups of patients are those who are over age 80, Asian Americans, and Hispanics.

Chart 11-7. Aggregate margins vary by type of freestanding dialysis facility, 2009

Type of facility	Percentage of Medicare payments going to freestanding facilities	Aggregate margin
All facilities	100%	3.1%
Urban	83	4.1
Rural	17	–1.4
LDOs	69	4.4
Non-LDOs	31	0.3

Note: LDO (large dialysis organization). Margins include payments and costs for composite rate services and injectable drugs.

Source: Compiled by MedPAC from 2009 cost reports and the 2009 institutional outpatient file from CMS.

- For 2009, the aggregate Medicare margin for composite rate services and injectable drugs was 3.1 percent.
- As in earlier years, we continue to see higher margins for facilities affiliated with the largest two chains. This finding stems from differences in the composite rate cost per treatment and drug payment per treatment. Compared with their counterparts, the composite rate cost per treatment was lower and the drug payment per treatment was higher for the two largest chains.
- In 2009, the gap between the Medicare margins for urban and rural facilities widened because of changes in the wage index and differences in the volume of drugs furnished across providers. The Commission will continue to monitor the adequacy of Medicare's payments for urban and rural facilities in upcoming years. Some rural facilities may benefit from the low-volume adjustment that is included in the new end-stage renal disease payment method that began in 2011.

Chart 11-8. Medicare hospice use and spending grew substantially from 2000 to 2009

	2000	2008	2009	Average annual percent change 2000–2008	Percent change 2008–2009
Beneficiaries in hospice	513,000	1,055,000	1,088,000	9.4%	3.1%
Medicare payments (in billions)	$2.9	$11.2	$12.0	18.4	7.1
Average length of stay among decedents (in days)	54	83	86	5.5	3.6
Median length of stay among decedents (in days)	17	17	17	0.0	0.0

Note: Average length of stay is calculated for decedents who received hospice care at the time of death or before death and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his/her lifetime.

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database, and the 100 percent hospice claims Standard Analytic File from CMS.

- The number of Medicare beneficiaries receiving hospice services more than doubled between 2000 and 2009, suggesting that access to hospice care has grown.
- The average length of stay among Medicare decedents who used hospice grew substantially over the decade, from 54 days in 2000 to 86 days in 2009. This growth reflects an increase in length of stay among hospice users with the longest stays while median length of stay remained unchanged (see Chart 11-12).
- Total Medicare payments to hospices quadrupled from 2000 to 2009 due to increased enrollment and longer lengths of stay.

Chart 11-9. Hospice use increased across beneficiary groups from 2000 to 2009

	Percent of decedents using hospice			Average annual percentage point change	Percentage point change
	2000	2008	2009	2000–2008	2008–2009
All	22.9%	40.1%	42.0%	2.2	1.9
FFS beneficiaries	21.5	39.2	40.9	2.2	1.7
MA beneficiaries	30.9	43.9	46.0	1.6	2.0
Dual eligibles	17.5	35.8	37.5	2.3	1.6
Nondual eligibles	24.5	41.5	43.4	2.1	1.9
Age (years)					
<65	17.0	25.0	26.0	1.0	0.9
65–84	24.7	39.3	40.9	1.8	1.5
85+	21.4	45.3	48.0	3.0	2.6
Race/ethnicity					
White	23.8	41.8	43.7	2.3	1.9
Minority	17.2	30.2	32.1	1.6	1.7
Gender					
Male	22.4	36.7	38.5	1.8	1.7
Female	23.3	43.0	45.0	2.5	2.0
Beneficiary location					
Urban	29.4	41.7	43.5	1.5	1.8
Rural, adjacent to urban	19.2	36.2	38.0	2.1	1.8
Rural, nonadjacent to urban	16.7	31.5	33.6	1.9	2.1

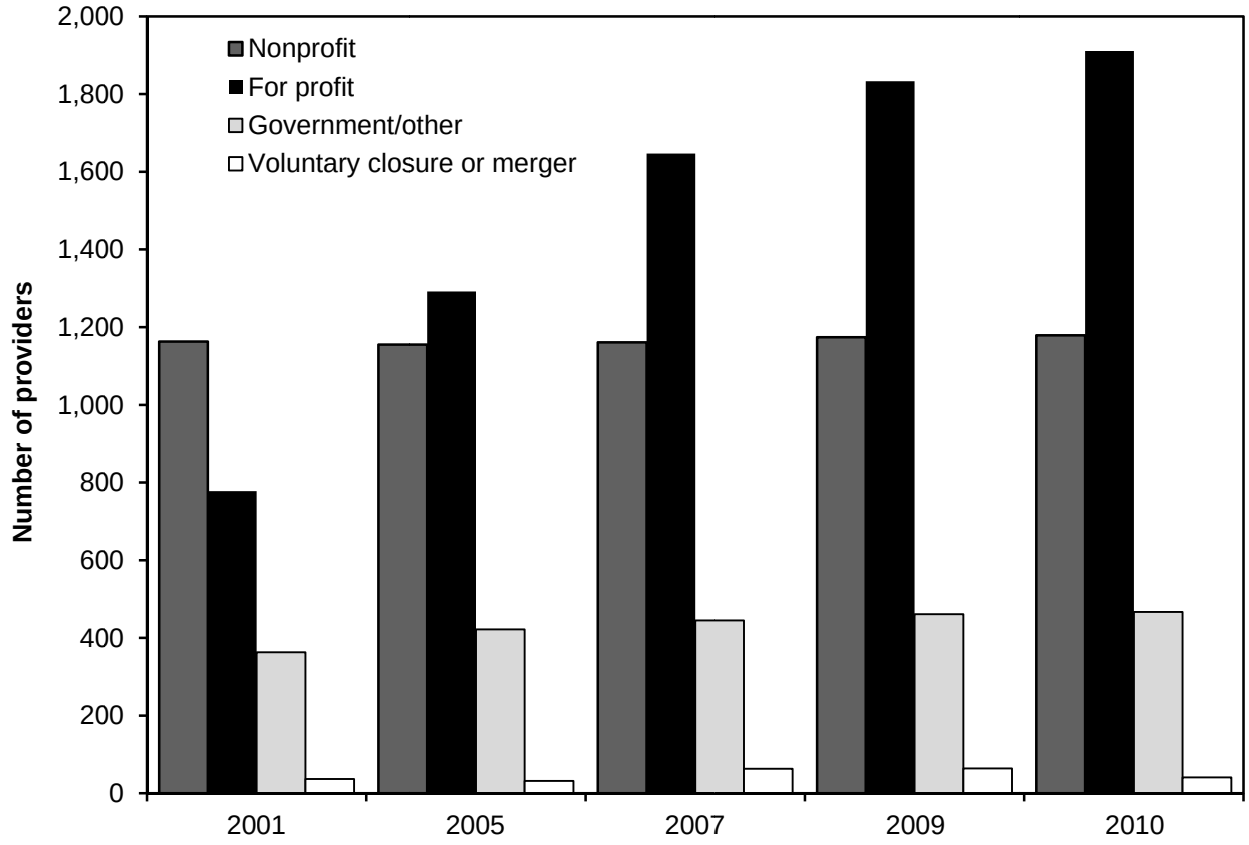
Note: FFS (fee-for-service), MA (Medicare Advantage).

Source: MedPAC analysis of data from the denominator file and the Medicare Beneficiary Database from CMS.

- Hospice use grew substantially in all beneficiary groups from 2000 to 2008 and continued to grow in 2009 for almost all beneficiary groups. Hospice use among Native North American beneficiaries declined one-tenth of a percentage point in 2009 (data not shown).

- Despite this growth, hospice use continued to vary by demographic and beneficiary characteristics. Medicare decedents who were older, White, female, Medicare Advantage enrollees, not dual eligible, or lived in an urban area were more likely to use hospice than their counterparts.

Chart 11-10. Number of Medicare-participating hospices has increased, largely driven by for-profit hospices



Source: CMS Providing Data Quickly Query. https://pdq.cms.hhs.gov/index.jsp.

- There were more than 3,500 Medicare-participating hospices in 2010. A majority of them were for-profit hospices.
- Between 2001 and 2010, the number Medicare-participating hospices grew by more than 1,000. For-profit hospices accounted for about 90 percent of that growth.
- In 2010, just over 40 hospices voluntarily exited the Medicare program due to a closure or merger, compared with just over 60 hospices annually from 2007 to 2009.

Chart 11-11. Hospice cases and length of stay, by diagnosis, 2008

	Diagnosis share of total cases	Percent of cases with length of stay greater than 180 days
Cancer (except lung cancer)	22%	10%
Circulatory, except heart failure	10	19
Lung cancer	9	8
Debility, NOS	9	24
Heart failure	8	22
Alzheimer's and similar disease	6	34
Unspecific symptoms/signs	6	24
Chronic airway obstruction, NOS	6	26
Dementia	5	29
Organic psychoses	4	28
Genitourinary disease	3	5
Respiratory disease	3	11
Nervous system, except Alzheimer's	3	32
Other	1	12
Digestive disease	1	9
All	100	20

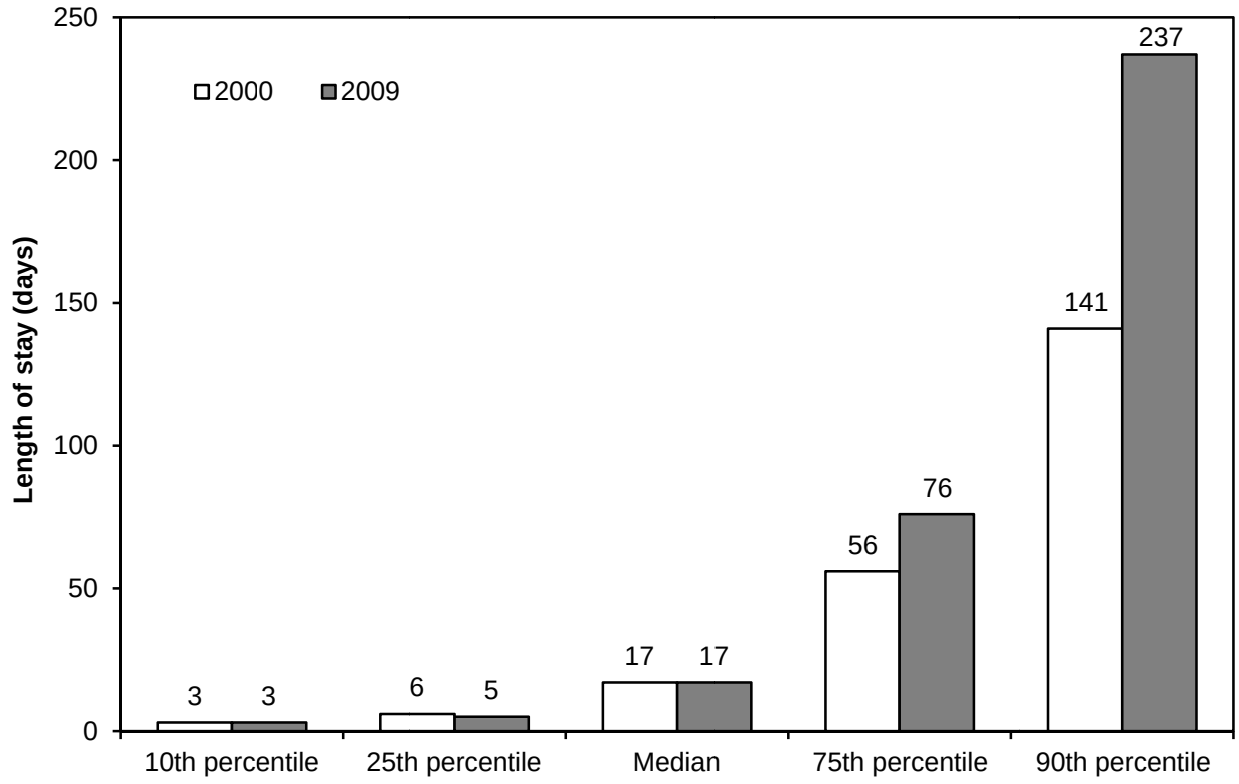
Note: NOS (not otherwise specified). Percent of cases by diagnosis does not sum to 100 due to the exclusion of patients with multiple diagnoses.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytical File from CMS.

- In 2008, the most common terminal diagnosis among Medicare hospice patients was cancer, accounting for nearly one-third of cases. The next most common diagnoses were heart failure and other circulatory conditions (18 percent of cases) and Alzheimer's disease, dementia, organic psychoses, and other neurological conditions (17 percent of cases).

- Length of stay varies by diagnosis. At least one-quarter of hospice patients with Alzheimer's disease, chronic airway obstruction, dementia, organic psychoses, and other neurological conditions had lengths of stay exceeding 180 days. Long hospice stays were least common among beneficiaries with cancer, genitourinary disease, and digestive disease.

Chart 11-12. Long hospice stays are getting longer, while short stays remain virtually unchanged, 2000 and 2009



Note: Data reflect hospice length of stay for Medicare decedents who used hospice at the time of death or before death. Length of stay reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his/her lifetime.

Source: MedPAC analysis of the denominator file and the Medicare Beneficiary Database from CMS.

- Long hospice stays have grown longer. For example, hospice length of stay at the 90th percentile grew from 141 days in 2000 to 237 days in 2009, an increase of more than 60 percent.
- Short stays in hospice have changed little since 2000. The median length of stay in hospice held steady at 17 days from 2000 to 2009. Hospice length of stay at the 25th percentile was 5 days in 2009, down slightly from 6 days in 2000.

Chart 11-13. Hospice average length of stay among decedents, by beneficiary and hospice characteristics, 2008

	Average length of stay among decedents (in days)
Beneficiary	
Diagnosis	
Cancer	53
Neurological	129
Heart/circulatory	76
Debility	94
COPD	104
Other	83
Site of service	
Home	86
Nursing facility	104
Assisted living facility	142
Hospice	
For profit	98
Nonprofit	68
Freestanding	86
Home health based	70
Hospital based	63

Note: COPD (chronic obstructive pulmonary disease). Average length of stay is calculated for Medicare beneficiaries who died in 2008 and used hospice that year and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his/her lifetime.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytical File data, Medicare Beneficiary Database, Medicare hospice cost reports, and Provider of Services file data from CMS.

- Hospice average length of stay varies by both beneficiary and provider characteristics.
- Beneficiaries with neurological conditions, chronic obstructive pulmonary disease, and debility have the longest average length of stay while beneficiaries with cancer have the shortest average length of stay.
- Beneficiaries who receive hospice services in assisted living facilities and nursing facilities have a longer average length of stay than beneficiaries who receive care at home.
- For-profit hospices have a longer average length of stay than nonprofit hospices.
- Freestanding hospices have a longer average length of stay than home health–based or hospital-based hospices.

Chart 11-14. Hospice aggregate Medicare margins, 2002–2008

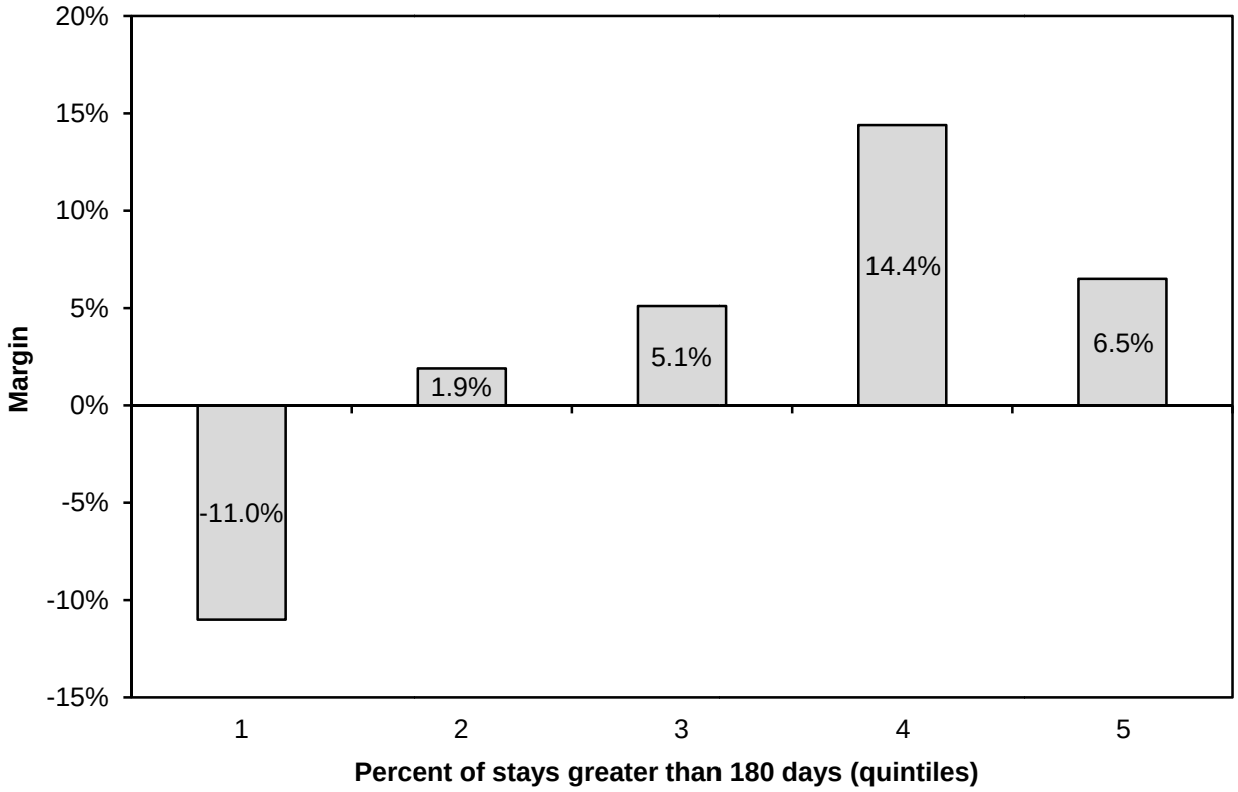
	Percent of hospices (2008)	2002	2005	2006	2007	2008
All	100%	5.5%	4.6%	6.4%	5.8%	5.1%
Freestanding	67	9.2	7.2	9.7	8.7	8.0
Home health based	17	2.0	3.1	3.8	2.3	2.7
Hospital based	16	–9.1	–9.1	–12.7	–10.6	–12.2
For profit	52	14.9	9.9	12.0	10.4	10.0
Nonprofit	35	0.2	1.0	1.5	1.7	0.2
Urban	69	6.1	5.1	7.1	6.4	5.6
Rural	31	0.7	0.2	0.8	1.4	1.3
Below cap	90	N/A	5.1	7.0	6.1	5.5
Above cap	10	N/A	-0.8	0.3	2.5	1.0
Above cap (including cap overpayments)	10	N/A	20.7	20.7	20.5	19.0

Note: N/A (not available). Margins for all provider categories exclude overpayments to above-cap hospices, except where specifically indicated. Margins are calculated based on Medicare-allowable, reimbursable costs. Percent of hospices does not sum to 100 by freestanding/provider-based categories and ownership categories because skilled nursing facility–based hospices and government hospices are not broken out separately.

Source: MedPAC analysis of Medicare hospice cost reports, 100 percent hospice claims Standard Analytic File, and Medicare Provider of Services data from CMS.

- The aggregate Medicare margin oscillated in a relatively narrow range between 2002 and 2008. The margin was 5.1 percent as of 2008.
- Margin estimates do not include Medicare nonreimbursable costs, such as bereavement and volunteer costs (at most 1.5 percent and 0.3 percent of total costs, respectively). Margins also do not include the costs and revenues associated with fundraising.
- Freestanding hospices had higher margins than provider-based (home health– and hospital-based) hospices, in part due to differences in their indirect costs. Provider-based hospices' indirect costs are higher than those of freestanding providers and are likely inflated due to the allocation of overhead from the parent provider.
- In 2008, for-profit hospice margins were strongly positive at 10.0 percent. The aggregate margin for nonprofit hospices was 0.2 percent. The subset of nonprofit hospices that were freestanding had a higher margin of 3.2 percent (not shown in table).
- Hospices that exceeded the cap (Medicare's aggregate average per beneficiary payment limit) had a 19 percent margin before the return of the cap overpayments.

Chart 11-15. Medicare margins are higher among hospices with more long stays, 2008



Note: Margins exclude overpayments to hospices that exceed the cap on the average annual Medicare payment per beneficiary. Margins are calculated based on Medicare-allowable, reimbursable costs.

Source: MedPAC analysis of Medicare hospice cost reports and 100 percent hospice claims Standard Analytic File from CMS.

- Medicare's per-diem-based payment system for hospice provides an incentive for longer lengths of stay.
- Hospices with more long-stay patients generally have higher margins. Hospices in the lowest length-of-stay quintile have a margin of –11.0 percent compared with a 14.4 percent margin for hospices in the second highest length-of-stay quintile.
- Margins are somewhat lower in the highest length-of-stay quintile (6.5 percent) compared with the second highest quintile (14.4 percent) because some hospices in the highest quintile exceeded Medicare's aggregate payment cap and must repay the overage. Hospices exceeding the cap had a 19 percent margin before the return of overpayments (Chart 11-14).

Chart 11-16. Hospices that exceeded Medicare's annual payment cap, selected years

	2002	2004	2005	2006	2007	2008*
Percent of hospices exceeding the cap	2.6%	5.8%	7.8%	9.4%	10.4%	10.2%
Average payments over the cap per hospice exceeding the cap (in thousands)	$470	$749	$755	$731	$612	$571
Payments over the cap as a percent of overall Medicare hospice spending	0.6%	1.7%	2.2%	2.4%	2.0%	1.7%

Note: The cap year is defined as the period beginning November 1 and ending October 31 of the following year.
*Due to a change in data availability, the 2008 estimates are based on a different methodology than the 2002–2007 estimates and are not precisely comparable to earlier years.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytic File data, Medicare hospice cost reports, Provider of Services file data from CMS, and CMS Providing Data Quickly system. Data on total spending for each fiscal year are from the CMS Office of the Actuary.

- The percent of hospices exceeding Medicare's aggregate average per beneficiary payment limit, or "cap," was 10.2 percent in 2008.
- Medicare payments over the cap represented 1.7 percent of total Medicare hospice spending in 2008.
- Estimates of hospices exceeding the cap for 2008 may not be comparable to estimates for prior years displayed in the chart because a new methodology was used in 2008. On the basis of additional analyses performed with the new methodology, we believe the percent of hospices exceeding the cap increased each year from 2002 to 2008, while total payments over the cap have declined since 2006.

Chart 11-17. Length-of-stay and live discharge rates for above- and below-cap hospices, 2008

Diagnosis	Percent of hospice users with stays exceeding 180 days		Live discharges as a percent of all discharges	
	Above-cap hospices	Below-cap hospices	Above-cap hospices	Below-cap hospices
All	41%	19%	44%	16%
Cancer	19	9	24	10
Neurological conditions	48	30	37	18
Heart/circulatory	44	18	52	16
Debility	43	23	49	21
COPD	47	24	52	20
Other	48	22	55	22

Note: COPD (chronic obstructive pulmonary disease). Length-of-stay data reflect the percent of hospice users in 2008 whose hospice length of stay was beyond 180 days.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytic File and denominator file from CMS.

- Above-cap hospices have substantially more patients with very long stays and more live discharges than below-cap hospices for all diagnoses.
- Between 44 percent and 48 percent of above-cap hospices' patients with neurological conditions, heart or circulatory conditions, or chronic obstructive pulmonary disease had stays exceeding 180 days compared with 18 percent to 30 percent at below-cap hospices.
- For all diagnoses, the live discharge rates at above-cap hospices were at least double and in some cases more than triple the rates at below-cap hospices. For example, among patients with heart or circulatory conditions, 52 percent of discharges at above-cap hospices were live discharges compared with 16 percent at below-cap hospices.

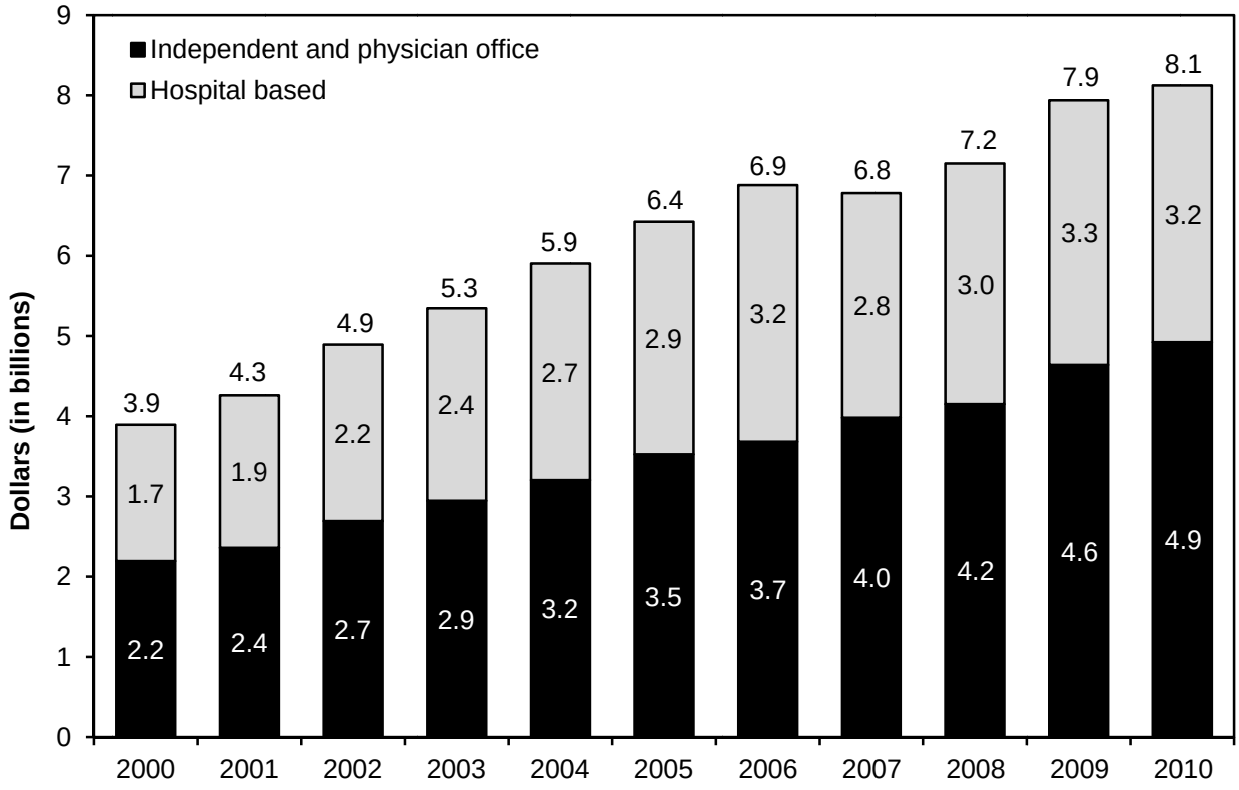
Chart 11-18. Hospice cap is unrelated to use of hospice services across states, 2008

Top 10 states with highest hospice use rates	Percent of: Decedents using hospice	Percent of: Hospices exceeding the cap
Arizona	58%	25%
Utah	54	28
Florida	53	10
Iowa	50	0
Delaware	48	0
Colorado	48	2
Oregon	48	0
Rhode Island	46	0
Texas	45	11
Michigan	45	3

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database, 100 percent hospice claims Standard Analytic File data, Medicare hospice cost reports from CMS and CMS Providing Data Quickly system.

- Six of the 10 states with the highest use of hospice among Medicare decedents have a very small percentage (0 percent to 3 percent) of hospices exceeding the cap. This finding demonstrates that high rates of hospice use can be achieved without hospices exceeding the cap.

Chart 11-19. Medicare spending for clinical laboratory services, fiscal years 2000–2010



Note: Spending is for services paid under the clinical laboratory fee schedule. Hospital-based services are furnished in labs owned or operated by hospitals. Total spending appears on top of each bar. The segments of each bar may not sum to the totals on top of each bar due to rounding.

Source: CMS, Office of the Actuary.

- Medicare spending for clinical laboratory services grew by an average of 9.7 percent per year between 2000 and 2006. This growth was driven by rising volume, as there was only one increase in lab payment rates during those years. Spending declined by 0.5 percent in 2007 due to a drop in hospital-based lab spending and increased by 4.4 percent in 2008, 11.2 percent in 2009, and 2.4 percent in 2010.
- In 2010, Medicare spent $8.1 billion (1.6 percent of total program spending) on clinical lab services.
- Hospital-based labs' share of total clinical lab spending increased from 44 percent in 2000 to 46 percent in 2006 but fell to 39 percent in 2009.

Web links. Other services

Dialysis

- More information on Medicare's payment system for outpatient dialysis services can be found in MedPAC's Payment Basics series.

  http://www.medpac.gov/documents/MedPAC_Payment_Basics_10_dialysis.pdf

- The U.S. Renal Data System provides information about the incidence and prevalence of patients with renal disease, their demographic and clinical characteristics, and their spending patterns.

  http://www.usrds.org

- The National Institute of Diabetes and Digestive and Kidney Diseases and the National Kidney Foundation provide health information about kidney disease for consumers.

  http://www.niddk.nih.gov/
  http://www.kidney.org/

- CMS provides specific information about each dialysis facility.

  http://www.medicare.gov/Dialysis/Home.asp

- Chapter 6 of the MedPAC March 2011 Report to the Congress provides information about the financial performance of dialysis facilities.

  http://medpac.gov/chapters/Mar11_Ch06.pdf

- MedPAC's June 2005 Report to the Congress recommends changes to how Medicare pays for composite rate services and injectable drugs.

  http://www.medpac.gov/publications%5Ccongressional_reports%5CJune05_ch4.pdf

- MedPAC's October 2003 report describes how Medicare could modernize the outpatient dialysis payment system.

  http://www.medpac.gov/publications/congressional_reports/oct2003_Dialysis.pdf

- MedPAC's comment on revisions to payment policies under the physician fee schedule for calendar year 2004 includes changes in how to pay for services furnished by nephrologists.

  http://medpac.gov/documents/100603_RevPhysFeeSched_CB_comment.pdf

- MedPAC commented on CMS's proposed rule to implement provisions of the Medicare Improvements for Patients and Providers Act of 2008 that modernize the outpatient dialysis payment system by broadening the payment bundle in 2011 and implementing a quality incentive program in 2012.

  http://medpac.gov/documents/End%20Stage%20Renal%20Disease.pdf

Hospice

- More information on Medicare's payment system for hospice services can be found in MedPAC's Payment Basics series.

  http://www.medpac.gov/documents/MedPAC_Payment_Basics_10_hospice.pdf

- Additional information and analysis related to the Medicare hospice benefit and the financial performance of hospice providers can be found in Chapter 11 of MedPAC's March 2011 Report to the Congress.

  http://www.medpac.gov/chapters/Mar11_Ch11.pdf

- Additional analyses of Medicare hospice visit patterns can be found in the online appendix to the hospice chapters in the March 2011 and March 2010 Report to the Congress.

  http://www.medpac.gov/chapters/Mar11_Ch11_APPENDIX.pdf

  http://www.medpac.gov/chapters/Mar10_Ch02E_APPENDIX.pdf

- Recommendations for reforms to the hospice payment system and steps to improve accountability and oversight of the benefit can be found in Chapter 6 of MedPAC's June 2009 Report to the Congress.

  http://www.medpac.gov/chapters/Mar09_ch06.pdf

- Information and analysis related to the Medicare hospice benefit, with a specific focus on the hospice cap, can be found in Chapter 8 of MedPAC's June 2008 Report to the Congress.

  http://www.medpac.gov/chapters/Jun08_Ch08.pdf

- CMS maintains a variety of information related to the hospice benefit.

  http://www.cms.gov/center/hospice.asp

- CMS also provides information on hospice for its beneficiaries.

  http://www.medicare.gov/Publications/Pubs/pdf/02154.pdf

Clinical laboratory

- More information on Medicare's payment system for clinical lab services can be found in MedPAC's Payment Basics series.

  http://www.medpac.gov/documents/MedPAC_briefs_Payment_Basics_10_clinical_lab.pdf

- Information about CMS's regulation of clinical laboratories, including the number and type of certified labs in the United States, can be found on the CMS website.

  http://www.cms.gov/CLIA